

**AMENDMENTS TO THE CLAIMS**

The below updated listing of pending claims is provided for the Examiner's convenience. This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (previously presented): An immunomodulatory polynucleotide/ microcarrier (IMP/MC) complex, comprising:

a polynucleotide covalently linked to the surface of a biodegradable micro carrier (MC), wherein said polynucleotide comprises the sequence 5'-CG-3', wherein the polynucleotide is greater than 6 nucleotides in length and wherein said MC is less than 10  $\mu\text{m}$  in size.

Claims 2-3 (canceled)

Claim 4 (original): The IMP/MC complex of claim 1, wherein said microcarrier is a liquid phase microcarrier.

Claim 5 (original): The IMP/MC complex of claim 1, wherein said microcarrier is a solid phase microcarrier.

Claim 6 (original): The IMP/MC complex of claim 1, wherein said microcarrier is from 25 nm to 5  $\mu\text{m}$  in size.

Claim 7 (original): The IMP/MC complex of claim 6, wherein said microcarrier is from 1.0  $\mu\text{m}$  to 2.0  $\mu\text{m}$  in size.

Claim 8 (original): The IMP/MC complex of claim 7, wherein said microcarrier is 1.4  $\mu\text{m}$  in size.

Claim 9 (original): The IMP/MC complex of claim 1, wherein said microcarrier is cationic.

Claim 10 (original): The IMP/MC complex of claim 1, wherein said complex is antigen-free.

Claim 11 (original): The IMP/MC complex of claim 1, wherein said polynucleotide comprises the sequence 5'-T, C, G-3'.

Claim 12 (original): The IMP/MC complex of claim 11, wherein said polynucleotide comprises the sequence 5'-TCGX<sub>1</sub>X<sub>2</sub>X<sub>3</sub>X<sub>4</sub>-3' or the sequence 5'-X<sub>1</sub>TCGX<sub>2</sub>X<sub>3</sub>X<sub>4</sub>-3', wherein X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, X<sub>4</sub> are nucleotides.

Claim 13 (previously presented): The IMP/MC complex of claim 12, wherein said polynucleotide comprises the sequence 5'-TCGTCGX<sub>4</sub>-3'.

Claim 14 (original): The IMP/MC complex of claim 12, wherein said polynucleotide comprises a sequence selected from the group consisting of 5'-TCGTCGA-3', 5'-TCGAAAA-3', 5'-TCGCCCC-3', 5'-TCGGGGG-3' and 5'-TCGTTTT-3'.

Claim 15 (original): The IMP/MC complex of claim 1, wherein said polynucleotide comprises the sequence 5'-C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 16 (original): The IMP/MC complex of claim 1, wherein said polynucleotide comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 17 (original): The IMP/MC complex of claim 11, wherein said polynucleotide comprises the sequence SEQ ID NO:1.

Claim 18 (original): The IMP/MC complex of claim 1, wherein said polynucleotide further comprises the sequence 5'-T, C, G-3'.

Claim 19 (original): The IMP/MC complex of any of claims 1, 11, 12, 13, 14, or 18, wherein said polynucleotide is 7 nucleotides in length.

Claim 20 (original): The IMP/MC complex of any of claims 1, 11, 12, 13, 14 or 18, wherein said complex further comprises an antigen.

Claim 21 (original): The IMP/MC complex of claim 20, wherein said antigen is an allergen.

Claim 22 (original): The IMP/MC complex of claim 1, wherein said polynucleotide comprises a phosphate backbone modification.

Claim 23 (original): The IMP/MC complex of claim 22, wherein said phosphate backbone modification is a phosphorothioate.

Claim 24 (withdrawn): A method of modulating an immune response in an individual comprising administering to an individual a composition comprising an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, said complex comprising a polynucleotide linked to a biodegradable microcarrier (MC), wherein said polynucleotide comprises the sequence 5'-C, G-3' and wherein said MC is less than 10  $\mu\text{m}$  in size, in an amount sufficient to modulate an immune response in said individual.

Claim 25 (withdrawn): The method of claim 24, wherein said microcarrier is a solid phase microcarrier.

Claim 26 (withdrawn): The method of claim 24, wherein said microcarrier is a liquid phase microcarrier.

Claim 27 (withdrawn): The method of claim 24, wherein said polynucleotide is covalently linked to said microcarrier.

Claim 28 (withdrawn): The method of claim 24, wherein said polynucleotide is non-covalently linked to said microcarrier.

Claim 29 (withdrawn): The method of claim 24, wherein said complex is antigen-free.

Claim 30 (withdrawn): The method of claim 24, wherein a Th1-type immune response is stimulated.

Claim 31 (withdrawn): The method of claim 24, wherein a Th2-type immune response is suppressed.

Claim 32 (withdrawn): The method of claim 24, wherein interferon-gamma (IFN- $\gamma$ ) is increased in said individual.

Claim 33 (withdrawn): The method of claim 24, wherein interferon-alpha (IFN- $\alpha$ ) is increased in said individual.

Claim 34 (withdrawn): The method of claim 24, wherein levels of IgE is reduced in said individual.

Claim 35 (withdrawn): The method of claim 24, wherein said polynucleotide comprises the sequence 5'-T, C, G-3'.

Claim 36 (withdrawn): The method of claim 35, wherein said polynucleotide comprises the sequence 5'-TCGX<sub>1</sub>X<sub>2</sub>X<sub>3</sub>X<sub>4</sub>-3' or the sequence 5'-X<sub>1</sub>TCGX<sub>2</sub>X<sub>3</sub>X<sub>4</sub>-3', wherein X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, X<sub>4</sub> are nucleotides.

Claim 37 (withdrawn): The method of claim 36, wherein the polynucleotide comprises the sequence 5'-TCGTCGX<sub>1</sub>-3', wherein X<sub>1</sub> is a nucleotide.

Claim 38 (withdrawn): The method of claim 36, wherein said polynucleotide comprises a sequence selected from the group consisting of 5'-TCGTCGA-3', 5'-TCGAAAA-3', 5'-TCGCCCC-3', 5'-TCGGGGG-3' and 5'-TCGTTTT-3'.

Claim 39 (withdrawn): The method of claim 24, wherein said polynucleotide comprises the sequence 5'-C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 40 (withdrawn): The method of claim 24, wherein said polynucleotide comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 41 (withdrawn): The method of claim 35, wherein said polynucleotide comprises the sequence SEQ ID NO:1.

Claim 42. (withdrawn): The method of claim 24, wherein said polynucleotide further comprises the sequence 5'-T, C, G-3'.

Claim 43 (withdrawn): The method of any of claims 24, 35, 36, 37, 38 or 42, wherein said polynucleotide is 7 nucleotides in length.

Claim 44 (withdrawn): The method of any of claims 24, 35, 36, 37, 38 or 42, wherein said composition further comprises an antigen.

Claim 45 (withdrawn): The method of claim 44, wherein said antigen is an allergen.

Claim 46 (withdrawn): The method of claim 24, wherein said polynucleotide comprises a phosphate backbone modification.

Claim 47 (withdrawn): The method of claim 46, wherein said phosphate backbone modification is a phosphorothioate.

Claim 48 (previously presented): A kit, comprising:  
an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, said complex comprising a polynucleotide covalently linked the surface of to a biodegradable microcarrier (MC), wherein said polynucleotide comprises the sequence 5'-CG-3', wherein the polynucleotide is greater than 6 nucleotides in length and wherein said MC is less than 10  $\mu\text{m}$  in size; and instructions for use of the IMP/MC complex in immunomodulation of an individual.

Claims 49-50 (canceled)

Claim 51 (original): The kit of claim 48, wherein said microcarrier is a liquid phase microcarrier.

Claim 52 (original): The kit of claim 48, wherein said microcarrier is a solid phase microcarrier.

Claim 53 (original): The kit of claim 48, wherein said microcarrier is from 25 nm to 5  $\mu\text{m}$  in size.

Claim 54 (original): The kit of claim 53, wherein said microcarrier is from 1.0  $\mu\text{m}$  to 2.0  $\mu\text{m}$  in size.

Claim 55 (original): The kit of claim 54, wherein said microcarrier is 1.4  $\mu\text{m}$  in size.

Claim 56 (original): The kit of claim 48, wherein said microcarrier is cationic.

Claim 57 (original): The kit of claim 48, wherein said complex is antigen-free.

Claim 58 (original): The kit of claim 48, wherein said polynucleotide comprises the sequence 5'-T, C, G-3'.

Claim 59 (original): The kit of claim 58, wherein said polynucleotide comprises the sequence 5'-TCGX1X2X3X4-3' or the sequence 5'-X1TCGX2X3X4-3', wherein X1, X2, X3, X4 are nucleotides.

Claim 60 (previously presented): The kit of claim 59, wherein said polynucleotide comprises the sequence 5'-TCGTCGX<sub>4</sub>-3'.

Claim 61 (original): The kit of claim 59, wherein said polynucleotide comprises a sequence selected from the group consisting of 5'-TCGTCGA-3', 5'-TCGAAAA-3', 5'-TCGCCCC-3', 5'-TCGGGGG-3' and 5'-TCGTTTT-3'.

Claim 62 (original): The kit of claim 48, wherein the polynucleotide comprises the sequence 5'-C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 63 (original): The kit of claim 48, wherein the polynucleotide comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 64. (original): The kit of claim 58, wherein the polynucleotide comprises the sequence SEQ ID NO:1.

Claim 65. (original): The kit of claim 48, wherein said polynucleotide further comprises the sequence 5'-T, C, G-3'.

Claim 66 (original): The kit of any of claims 48, 58, 59, 60, 61 or 65, wherein said kit further comprises an antigen.

Claim 67 (original): The kit of claim 66, wherein said antigen is an allergen.

Claim 68 (original): The kit of claim 48, wherein said polynucleotide comprises a phosphate backbone modification.

Claim 69 (original): The kit of claim 68, wherein said phosphate backbone modification is a phosphorothioate.

Claim 70 (previously presented): A kit, comprising:  
an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, said complex comprising a polynucleotide covalently linked to the surface of a biodegradable microcarrier (MC), wherein said polynucleotide comprises the sequence 5'-CG-3' and wherein said polynucleotide is 7 nucleotides in length; and  
instructions for use of the IMP/MC complex in immunomodulation of an individual.

Claim 71 (original): The kit of claim 70, wherein said polynucleotide comprises the sequence 5'-T, C, G-3'.

Claim 72 (original): The kit of claim 71, wherein said polynucleotide consists of the sequence 5'-TCGX<sub>1</sub>X<sub>2</sub>X<sub>3</sub>X<sub>4</sub>-3' or the sequence 5'-X<sub>1</sub>TCGX<sub>2</sub>X<sub>3</sub>X<sub>4</sub>-3', wherein X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, X<sub>4</sub> are nucleotides.

Claim 73 (previously presented): The kit of claim 72, wherein said polynucleotide consists of the sequence 5'-TCGTCGX<sub>4</sub>-3'.

Claim 74 (original): The kit of claim 72, wherein said polynucleotide consists of a sequence selected from the group consisting of 5'-TCGTCGA-3', 5'-TCGAAAA-3', 5'-TCGCCCC-3', 5'-TCGGGGG-3' and 5'-TCGTTTT-3'.

Claim 75 (original): The kit of claim 70, wherein said polynucleotide further comprises the sequence 5'-T, C, G-3'.

Claim 76 (original): The kit of claim 70, wherein said complex is antigen-free.

Claim 77 (original): The kit of claim 70, further comprising an antigen.



Claim 78 (original): The kit of claim 77, wherein said antigen is an allergen.

Claim 79 (original): The kit of claim 70, wherein said polynucleotide comprises a phosphate backbone modification.

Claim 80 (original): The kit of claim 79, wherein said phosphate backbone modification is a phosphorothioate.

Claim 81 (original): A composition comprising an IMP/MC complex of claim 1 and a pharmaceutically acceptable excipient.

Claim 82 (original): A composition according to claim 81, wherein the composition is antigen-free.

Claim 83 (original): A composition according to claim 81, wherein the composition further comprises an antigen.

Claim 84 (original): A composition according to claim 83, wherein the antigen is an allergen.